

REMARKS

This responds to the Office Action mailed on March 24, 2004.

No claims are amended, no claims are canceled, and no claims are added; as a result, claims 1-24 are now pending in this application.

§103 Rejection of the Claims

Claims 1-24 were rejected under 35 USC § 103(a) as being unpatentable over Lawless et al. (U.S. 5,818,469; hereinafter referred to as Lawless) in view of Grossman et al. (U.S. 5,230,039; hereinafter referred to as Grossman). Applicant respectfully traverses this rejection because the Office Action has not established a *prima facie* case of obviousness regarding Claims 1-24.

The Examiner has the burden under 35 U.S.C. § 103 to establish a *prima facie* case of obviousness. *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). To do that the Examiner must show that some objective teaching in the prior art or some knowledge generally available to one of ordinary skill in the art would lead an individual to combine the relevant teaching of the references. *Id.*

The *Fine* court stated that:

Obviousness is tested by "what the combined teaching of the references would have suggested to those of ordinary skill in the art." *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 878 (CCPA 1981)). But it "cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination." *ACS Hosp. Sys.*, 732 F.2d at 1577, 221 USPQ at 933. And "teachings of references can be combined *only* if there is some suggestion or incentive to do so." *Id.* (emphasis in original).

The M.P.E.P. adopts this line of reasoning, stating that

In order for the Examiner to establish a *prima facie* case of obviousness, three base criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one

of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *M.P.E.P.* § 2142 (citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed.Cir. 1991)).

As noted in Applicant's response to the Office Action mailed November 27, 2002, the Office Action does not make out a *prima facie* case of obviousness because the Office Action does not provide a suggestion or motivation to combine the cited references. The Office Action does not point to a passage from the Lawless or Grossman references that suggests the combination. Moreover, the Office Action does not look to knowledge generally available to one of ordinary skill in the art as a teaching or suggestion to combine Lawless and Grossman. Therefore, Applicant respectfully submits that the rejection to claims 1-24 over Lawless in view of Grossman is improper and should be withdrawn.

Furthermore, Applicant respectfully submits that the Office Action does not make out a *prima facie* case of obviousness because, even if properly combined, the cited references fail to teach or suggest all the elements of claims 1, 5, 9, 13, 17, 19, and 22.

Regarding independent claim 1, the Office Action asserts that Lawless teaches or suggests the claimed "obtaining a texture usage mask of a subject texture" at Column 3, Line 5 to Column 6, Line 26. However, Applicant was unable to find a teaching or suggestion of a "texture usage mask" in the cited passage or anywhere else in Lawless. Additionally, Applicant was unable to find any passage in Grossman that teaches or suggests a "texture usage mask." Therefore, Applicant respectfully submits that the combination of Lawless and Grossman does not teach or suggest "obtaining a texture usage mask of a subject texture," as recited in claim 1.

Independent claim 1 also recites "obtaining an inverted context ID of a subject context." The Office Action indicates Lawless' attribute change being flagged (See Lawless at Column 3, Line 5 to Column 6, Line 26) teaches the claimed "obtaining an inverted context ID of a subject context." Applicant respectfully submits that the Office Action has mischaracterized Lawless. Lawless' "attribute defines a state [of an object] such as linestyle, color, surface texture, material or matrices." (Insertion added.) Lawless at Column 3, Lines 4-5. In the passage cited in the

Office Action, Lawless describes flagging an attribute change command for changing an attribute (i.e., linestyle, color, surface texture, etc...) of an object. Applicant respectfully submits that Lawless' attribute change command is not a context and, as such, Lawless' attribute change command being flagged does not teach or suggest a "context ID of a subject context." Applicant can find no passage in Lawless that teaches or suggests the claimed "context ID of a subject context." (Emphasis added.) Additionally, Applicant can find no passage in Grossman that teaches or suggests the claimed "context ID of a subject context." Applicant respectfully submits that because the combination of Lawless and Grossman does not teach or suggest a "context ID of a subject context," the combination certainly does not teach the claimed "obtaining an inverted context ID of a subject context." (Emphasis added.)

Independent claim 1 further recites "ANDing the texture usage mask of the subject texture with the inverted context ID of the subject context to produce a resultant value." (Emphasis added.) Applicant respectfully submits that since the combination of Lawless and Grossman does not teach or suggest either the claimed "texture usage mask" or the claimed "inverted context ID", it cannot teach or suggest "ANDing the texture usage mask ... with the inverted context ID."

The Office Action asserts that Grossman "indicates that it's well known to have texture mapping wherein a mask value is compared to determine if the resultant value is being equal to 0 or not based on the texture being used." Applicant respectfully submits that the Office Action has mischaracterized Grossman because Grossman is not using a mask value to determine whether a texture is being used by a particular context. Instead, Grossman's mask value is being used to determine whether a texture will be applied to all pixels of an object. For at least the reasons set for above, Applicant respectfully submits that the combination of Lawless and Grossman does not teach or suggest the claimed "ANDing the texture usage mask of the subject texture with the inverted context ID of the subject context to produce a resultant value."

Independent claim 1 also recites "detecting that the subject texture is not being shared by another context." The Office Action asserts that Lawless teaches the claimed texture sharing by teaching that "the command is received by the master thread and a determination is made as to whether an attribute change (i.e. texture sharing) is required for the particular command received." Office Action at Page 3, Last Paragraph, Lines 3-6. However, Applicant respectfully

submits that determining whether an attribute change is required for the particular command is not the claimed “subject texture is being shared by another context.” However, even if it were, Applicant cannot find any passage in Lawless that teaches or suggests determining whether an attribute change is required for a particular command received. Lawless teaches its master thread doing many things regarding the attribute change. For example Lawless states, “For each attribute command that is received, the master thread 105 updates the state of the master graphics context 106, flags the particular change, and places the command in a workgroup.” Lawless at Column 3, Lines 57-61. However, Applicant cannot find a passage that teaches or suggests determining whether an attribute change is required for a particular command received.

Additionally, Applicant can find no passage in Grossman that teaches or suggests the claimed “detecting that the subject texture is not being shared by another context.” Applicant respectfully submits that the combination of Lawless and Grossman does not teach or suggest the claimed “detecting that the subject texture is not being shared by another context.”

Independent claims 5, 9, 13, and 17 include features similar to those discussed regarding independent claim 1.

Each of claims 2-4, 6-8, 10-12, 14-16, and 18 depend, directly or indirectly, on one of independent claims 1, 5, 9, 13, or 17.

For at least those reasons discussed above, Applicant respectfully submits that the combination of Lawless and Grossman does not teach or suggest each and every element of independent claims 1-18. Therefore, Applicant requests that the rejections be withdrawn.

The Office Action listed independent claim 19 in its rejection of the other independent claims. (See Office Action at Page 3, final two paragraphs.) The Office Action did not discuss any of the elements of claim 19 and did not indicate where the elements of claim 19 are found in the Examiner’s combination of Lawless and Grossman. In particular, Applicant respectfully submits that the Office Action does not point to any passage in Lawless or Grossman that teaches or suggests the claimed “number of texture units to process a number of subject textures, wherein a texture unit of the number of texture units is associated with one of a number of contexts”, “texture memory to store at least one of the number of subject textures”, or “system memory to store at least one of the number of subject textures.” Applicant respectfully submits that the Office Action also does not point out any passage in Lawless or Grossman that teaches or

suggests the claimed operations to, “clear the identification of the context in the texture usage mask associated with the subject texture”, “attach a different subject texture to the one of the number of texture units that completed the processing of the texture” and “set the identification of the context in the texture usage mask for the subject textures being processed by the number of texture units in the context.” Therefore, Applicant respectfully submits that the combination of Lawless and Grossman does not teach or suggest each and every element of independent claim 19.

The Office Action listed independent claim 19 in its rejection of the other independent claims. (See Office Action at Page 3, final two paragraphs.) The Office Action did not discuss any of the elements of claim 19 and did not indicate where the elements of claim 19 are found in the Examiner’s combination of Lawless and Grossman. In particular, Applicant respectfully submits that the Office Action does not point to any passage in Lawless or Grossman that teaches or suggests the claimed “storage device to store texture usage marks of a number of textures and to store context identifiers for a number of contexts” or “random access memory to store at least a part of the number of textures.” Moreover, the Action also does not point out any passage in Lawless or Grossman that teaches or suggests the claimed operations to “detect whether a texture is shared among at least two different units associated with at least two different contexts or shared among at least two different units within a same context based on a logical operation of the retrieved texture usage mark and the retrieved context identifier.” As such, Applicant respectfully submits that the combination of Lawless and Grossman does not teach or suggest each and every element of independent claim 22.

Each of claims 20, 21, 23, and 24 depend, directly or indirectly, on dependent claims 19 or 22. For at least the reasons discussed above, Applicant respectfully submits that the combination of Lawless and Grossman does not teach or suggest each and every element of dependent claims 20, 21, 23, and 24.

RESPONSE UNDER 37 C.F.R. 1.116 – EXPEDITED PROCEDURE

Serial Number: 09/672954

Filing Date: September 29, 2000

Title: EFFICIENT DETECTION OF TEXTURE SHARING BETWEEN MULTIPLE CONTEXTS

Assignee: Intel Corporation

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Dkt: 884.895US1 (INTEL)

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Applicant does not admit that documents cited under 35 U.S.C. §§ 102(a), 102(e), 103/102(a), or 103/102(e) are prior art, and reserves the right to swear behind them at a later date. Arguments presented to distinguish such documents should not be construed as admissions that the documents are prior art.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 371-2103 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

BIMAL PODDAR

By his Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
Attorneys for Intel Corporation
P.O. Box 2938
Minneapolis, Minnesota 55402
(612) 371-2103

Date

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By

Gregg A. Peacock
Reg. No. 45,001

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 24th day of May 2004.

Anne M. Richards

Name

Signature